



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/049,431	02/12/2002	Georg Berceli	100564-00094	3687

6449 7590 09/14/2004

ROTHWELL, FIGG, ERNST & MANBECK, P.C.  
1425 K STREET, N.W.  
SUITE 800  
WASHINGTON, DC 20005

EXAMINER

RODRIGUEZ, JOSEPH C

ART UNIT	PAPER NUMBER
----------	--------------

3653

DATE MAILED: 09/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/049,431	<b>Applicant(s)</b> BERCELI, GEORG <span style="float: right;">37</span>	
	<b>Examiner</b> Joseph C Rodriguez	<b>Art Unit</b> 3653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL.      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 6-23 is/are pending in the application.  
     4a) Of the above claim(s) 10-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 6-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-3 and 6-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding these claims, significant portions of the claim language remain nonsensical and difficult to interpret, thus rendering the claims indefinite. For example, the following claim language is nonsensical-

...depending on a sorting criterion as to whether an order number of a respective object has or would have a zero or a one in its binary representation at a point that depends on a relevant sorting step of said successive sorting steps, allocating the respective object to a respective first storage area or a respective second... (claim 1, 2<sup>nd</sup> indent)  
Here, it is unclear how to fulfill this conditional phrasing. How does one determine "a point that depends on a relevant sorting step" if it is unclear what "point" Applicant is referring to or what is meant by "relevant"? Further, Applicant often resorts to the use of unclear phrasing, such as "being relevant" (claim 1, 3<sup>rd</sup> indent), and complex conditional phrasing, such as the use of multiple "or"s, or some mix of the two when defining the invention (See e.g., claim 1, last indent, "...said second sorting step and then the objects from a respective second storage area of said second sorting step or of first all the objects from the respective second storage area of said second sorting step and then the objects from the respective first storage area of said second sorting step being subjected to the sorting treatment...").

Further, as the apparatus depends from the method claims, the functioning of the apparatus claim is also rendered indefinite. The indefiniteness of the apparatus claims is further compounded by the use of indefinite language. For example, the limitation "the relevant objects" (claim 6, 4<sup>th</sup> ln. from bottom of pg. 5) has insufficient antecedent basis and the following claim language is nonsensical for the reasons discussed above:

...digit of the order number in the binary representation being relevant for the sorting criterion in the first sorting step and the respective next most significant digit in the order number in the binary representation being relevant for the sorting criterion in the successive further sorting steps and, beginning at the second sorting step, either first all the objects from the first source storage area (QS1) and then the objects from the second source storage area (QS2) or first all the objects from the second source storage area (QS2) and then the objects from the first source storage area (QS1) – maintaining the relevant source storage area sequence for all further sorting steps - being supplied to the diverter device (W). (claim 6, last indent)

Here, it is noted that Applicant has spoken to Examiner numerous times and has repeatedly insisted that the language is definite. However, as explained above and in previous Office Actions, the scope of the claims remains difficult to ascertain, thus rendering the claim limitations indefinite. Examiner recommends amending the claim language with clear and understandable phrasing.

Further, it is worth noting that Examiner previously stated the following (see excerpt below), but Applicant still insists that the claims remain definite.

Examiner recommends amending the claim language to clearly establish the sorting steps and features of the claimed sorting method and device. Examiner further recommends replacing indefinite claim language such as "being relevant", "either"- "or", and "respective" to clearly specify what objects are being referred to, how the sorting criterion is established, and how these objects are handled by the sorting method and device.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Here, as the scope of the claims is indefinite as discussed above, Examiner has interpreted the essence of the invention as requiring successive sorting steps based on the binary representation of the object order.

Claims 1 and 6-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Smith et al. ("Smith")(US '814).

Smith teaches a method and device for sorting a group of objects (Fig. 1-8) wherein a binary representation of the sorting criterion (col. 15, ln. 20 et seq.) is used to sort objects in multiple passes based on a significant digit (Abstract). Here, the plurality of sorting rails (Fig. 1, 8, near 32, 258, 268) can be regarded as the respective conveying paths and storage sections (i.e., conveying circuits) and the switches (near 30, 40, 266, 277) as the diverters. Further, the claimed device features not cited above are clearly depicted in figures 1 and 8.

Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith in view of Hart (US '122).

Smith as set forth above teaches all that is claimed except for expressly teaching the forming of sub-groups and the later rejoining of said sub-groups. Hart, however, teaches an object sorting method that utilizes the formation of sub-groups (Abstract). Moreover, this feature simplifies the complex conveyor system and allows for a wider variety of selection criteria (col. 1, ln. 55 et seq.). Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the invention of Smith as taught above.

#### ***Election/Restrictions***

Claims 10-23 remain withdrawn as these claims lack unity of invention with claims 1-3 and 6-9 because they are not so linked as to form a single general inventive concept under PCT Rule 13.1. That is, claims 10-23 lack the same or corresponding special technical features with claims 1-3 and 6-9.

#### ***Conclusion***

Any references not explicitly discussed above but made of record are considered relevant to the prosecution of the instant application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph C Rodriguez whose telephone number is **703-308-8342**. The examiner can normally be reached on M-F during normal business hours (9 am – 6 pm, EST).

The **Official** fax phone number for the organization where this application or proceeding is assigned is **703-872-9326** (After-Final **703-972-9327**).

The **UnOfficial** fax phone number for the organization where this application or proceeding is assigned is **703-306-2571** or **703-308-6552**.

The examiner's **UNOFFICIAL Personal fax number** is **703-746-3678**.

Further, information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system.

Status information for published applications may be obtained from either Private PMR or Public PAIR. Status information for unpublished applications is available through Private PMR only.

For more information about the PAIR system, see

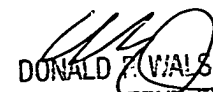
<http://pair-direct.uspto.gov>

Should you have questions on access to the Private PMR system, contact the Electronic Business Center (EBC) at 866-217-9197 (Toll Free).

Alternatively, inquiries of a general nature or relating to the status of this application or proceeding can also be directed to the **Receptionist** whose telephone number is **703-308-1113**.

\*\*\*

September 10, 2004

  
DONALD Z. WALSH  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600